



Lead Update

Making homes lead safe BEFORE the baby is born!

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With additional funding from the Centers for Disease Control and Prevention (CDC), the Department of Health's Childhood Lead Poisoning Prevention Program is starting a new initiative called "KEEP YOUR BABY LEAD SAFE". This project will connect pregnant women with lead safe home education and resources. Counselors from the free pregnancy test program at the five Providence Community Health Centers will inform pregnant women about this opportunity and will encourage them to sign up. Insurance coverage and homeowner/renter statuses are not barriers to sign up for the "KEEP YOUR BABY LEAD SAFE" program.

Information will be collected and forwarded to Care New England Home Health. A home visitor will contact the interested party to schedule a prenatal visit at no cost to the family. In addition to providing lead prevention education, the visit will include a prenatal, environmental and homeownership assessment. Depending on the homeownership assessment, pregnant women may then be connected with the City of Providence's Lead Program to start the application process and determine eligibility for removal of lead hazards in their homes through the City of Providence's Lead Hazard Reduction Program. All pregnant women who participate in this program will receive several home visits from Care New England Home Health. Those who are found eligible for the lead hazard removal program will receive ongoing support throughout the process, until the work in their homes is completed.

This is a pilot initiative that is only being offered to Providence residents on a first-come, first-served basis until the program's funds are exhausted. The program will be evaluated for future implementation, depending upon resource availability.

For more information and questions about the "Keep Your Baby Lead Safe" program, contact Pat Raymond, RN at PatR@doh.state.ri.us.

Case Management Evaluation

In order to better understand the process and outcomes of case management for lead poisoned children in Rhode Island, we recently undertook a detailed evaluation of case management services. In addition to reviewing data reported back to the program from the case management providers and children's blood lead levels, our Parent Consultant called and surveyed families who had been offered case management. Highlights of the results include:

Case Capture: Looking at the 726 first time referrals for case management services in the study timeframe, 92 cases (12.7%) were not serviced because of parent refusal and in 38 cases (5.2%) the family could not be located, for an overall capture rate of 82.1%.

Process of Case Management: Nearly all of the survey respondents who accepted services were satisfied with all areas of the service. Parents reported being contacted rapidly, offered appointments at times convenient for them, provided a case manager who spoke their language, and treated with respect and care. Parents overwhelming reported the interactions with their case manager to be fruitful.

Follow-up Blood Lead Testing: Overall, 77.3% of children who completed case management received a follow-up blood test while their case was open. Regardless of case closure, 97.7% of all clients eventually had a follow-up test. 71% of children with a BLL <25 who completed case management had a follow-up test within the 3 months as recommended by the CDC. Only 43% of children with a BLL \geq 25 had a follow-up test within a month (again as the CDC recommends), but 86% did receive a follow-up within three months. Those that refused or did not complete case management services were less likely to have a follow-up test at all (93%) and to have it within 3 months (54% for BLL <25, 75% for BLL \geq 25).

Decline in Blood Lead Levels: The change in blood lead level from the test that opened the case to the first test following case closure was calculated for children who completed case management. After a median 237 days, 5.9% had no change in BLL (+/- 1), 9.4% had an increase, with the remainder having a decline. The mean decline was 9.4 μ g/dL (95% CI: 8.3 to 10.5). As a comparison, children who did not complete or refused case management services had a mean decline of 9.8 μ g/dL (95%CI: 8.7 to 10.8), also a median of 237 days after the initial BLL. This analysis, however, does not consider many potentially confounding factors that could influence blood lead levels.

Coordination with Environmental Inspections: Children referred for case management are also referred for a comprehensive environmental inspection to identify sources of lead. Overall, 15% refuse the inspection, with 7.9% of those who completed case management refusing the inspection. Unsurprisingly, 34% of those who refused all case management services also refused the inspection.

Parent Awareness and Understanding of Lead Poisoning: In the survey, parents who completed case management identified more techniques and more accurate controls than those who refused services. Individuals in both groups, however, identified some "wrong" approaches to lead issues. Those that received case management were more likely to identify control measures they are still doing than those who refused services, but a substantial number appear to have discontinued most control measures. There is a strong belief amongst parents who accepted and refused services that their current environment is "lead safe" which is almost certainly an over-estimate of its actual safety.

For more information, contact Patrick MacRoy, at PatrickM@doh.state.ri.us